

**TargetStrategies™**  
**Aligned Reading Strategies**  
**Priority Academic Student Skills**  
**8<sup>th</sup> Grade**

**PASS Objective:** OKR081502e  
Research and information: Conduct research and organize information: Accessing information: Interpreting information: Analyze and evaluate information from a variety of sources: Interpret and use graphic sources of information such as maps, graphs, timelines, or tables to address research questions (STANDARD 5.2e)

**Focus Objective:** The student will interpret and use maps, graphs, timelines, and tables to address research questions.

**Genre:** Nonfiction

**Reading Integration:** Language Arts

**Level:** Analysis

**Prerequisite Skills:**

- determine evidence from a passage that supports a conclusion (R8.9)
- determine the main idea of a nonfictional passage (R8.10)
- differentiate between the main idea and supporting ideas in a passage (R8.11)
- draw reasonable conclusions from the information in a passage (R8.12)
- identify cause-and-effect relationships in a passage (R8.13)
- identify the purpose, audience, and main idea of a passage (R8.15)
- make inferences based on stated and implied information in a passage (R8.16)
- apply knowledge of resource materials to determine the appropriate use of various types (R8.28)
- determine whether a statement is opinion or fact

(Coding refers to an applicable TargetFundamentals™ lesson.)

**Related Objectives:**

OKR081301b      Comprehension: Interact with the words and concepts in the text to construct an appropriate meaning: Literal understanding: Show understanding by asking questions and supporting answers with literal information from text (STANDARD 3.1b)

- OKR081302a Comprehension: Interact with the words and concepts in the text to construct an appropriate meaning: Inferences and interpreting: Make inferences and draw conclusions supported by text evidence and student experiences (STANDARD 3.2a)
- OKR081303a Comprehension: Interact with the words and concepts in the text to construct an appropriate meaning: Summary and generalization: Determine the main (or major) idea and how those ideas are supported with specific details (STANDARD 3.3a)
- OKR081303b Comprehension: Interact with the words and concepts in the text to construct an appropriate meaning: Summary and generalization: Paraphrase and summarize text to recall, inform, or organize ideas (STANDARD 3.3b)
- OKR081304d Comprehension: Interact with the words and concepts in the text to construct an appropriate meaning: Analysis and evaluation: Problem/solution: Offer observations, make connections, react, speculate, interpret, and raise questions in response to text (STANDARD 3.4d)
- OKR081501a Research and information: Conduct research and organize information: Accessing information: Select the best source for a given purpose, locate information relevant to research questioning: Access information from a variety of primary and secondary sources, including electronic text, experts, and prime resources, to locate information relevant to research questioning (STANDARD 5.1a)
- OKR081501b Research and information: Conduct research and organize information: Accessing information: Select the best source for a given purpose, locate information relevant to research questioning: Use text organizers, including headings, graphic features (e.g., boldface, italic type), and tables of contents, to locate and organize information (STANDARD 5.1b)
- OKR081501c Research and information: Conduct research and organize information: Accessing information: Select the best source for a given purpose, locate information relevant to research questioning: Use organizational strategies to learn and recall important ideas from texts, such as preview, questions, reread, and record, as an aid to comprehend increasingly difficult content material (STANDARD 5.1c)
- OKR081502a Research and information: Conduct research and organize information: Accessing information: Interpreting information: Analyze and evaluate information from a variety of sources: Record, organize, and display relevant information from multiple sources in systematic ways (e.g., outlines, timelines, graphic organizers, or note cards) (STANDARD 5.2a)
- OKR081502b Research and information: Conduct research and organize information: Accessing information: Interpreting information: Analyze and evaluate information from a variety of sources: Analyze and paraphrase or summarize information from a variety of sources into a research paper (STANDARD 5.2b)

## INSTRUCTIONAL PREPARATION

Choose or prepare the following:

- two grade-level-appropriate nonfictional passages that contain a map, graph, timeline, and table (use for Practice and for Assessment)
- a list of literal and interpretative questions that correspond to one of the two chosen passages (use for Practice)

Duplicate the following (one per student unless otherwise indicated):

- “A Little Country in Europe” passage (use for Instruction)
- *Graphic Information about Portugal* sheet (use for Instruction)
- *What Do I Know about Portugal?* handout (use for Instruction)
- the chosen passages (use one for Practice and one for Assessment)
- the prepared list of questions (use for Practice)

Prepare a transparency of the following:

- *A Few Graphic Sources* sheet (use for Instruction)
- “A Little Country in Europe” passage (use for Instruction)
- *Graphic Information about Portugal* sheet (use for Instruction)
- *What Do I Know about Portugal?* handout (use for Instruction)

Display the Focus Question:

- What does a reader need to know to interpret and use maps, graphs, timelines, and tables?

## INSTRUCTION

1. To begin the lesson, display the *A Few Graphic Sources* transparency. Tell the students to find an example of a map in one of their textbooks and study it. Ask the following questions:

- ✓ What information is given on the map?
- ✓ What helps the reader understand what is shown on the map?
- ✓ What is a good definition for a map?
- ✓ Why did the author include a map?
- ✓ What are other uses for maps?

With the students’ assistance, fill in the “Definition” and “Possible Uses” columns for a map. Responses will vary; accept all reasonable responses. Discuss the responses for accuracy. Repeat this procedure with a graph, a timeline, and a table.

2. Facilitate a discussion that shows that often an author will include information in a visual or graphic form because that information is often easier to understand and remember when presented that way rather than in a text-only format. Explain to the students that being able to understand the information in maps, graphs, timelines, and tables is essential to answering research questions.

3. Ask the focus question. Give the students time to think about it. Facilitate a discussion that leads to the understanding that to interpret and use maps, graphs, timelines, and tables, a reader needs to understand
  - ✓ the information given in the graphic,
  - ✓ how the information is organized in the graphic,
  - ✓ the author's purpose in using the graphic.
4. Distribute copies of the "A Little Country in Europe" passage and display the transparency. Read aloud the passage while the students read along silently. Discuss the information given in the passage.
5. Distribute the *Graphic Information about Portugal* sheet and display the graphic. Tell the students to focus on the map graphic. Ask the following questions:
  - ✓ What information is given on this map? (*An appropriate response is as follows: it shows the location of Portugal, Spain, France, and Italy; it shows the location of the cities of Lisbon and Porto; it shows the location of the Atlantic Ocean and the Mediterranean Sea in relation to the Iberian Peninsula.*)
  - ✓ How is the information organized on the map? (*An appropriate response is as follows: each country is shown in its geographic position relative to the others.*)
  - ✓ What is the purpose of using the map? (*An appropriate response is as follows: to show the size, location, and cities of Portugal.*)

Discuss the responses for accuracy. Then repeat the same questioning sequence for the graph, the timeline, and the table.

6. Distribute copies of the *What Do I Know about Portugal?* handout and display the transparency. Tell the students that each graphic on the *Graphic Information about Portugal* sheet provides information that could be used in a research paper. Read the first question that can be answered by the information on the map. Ask a volunteer to share his or her response. Discuss the response for accuracy. Model how to write the appropriate response on the line below the question. Repeat this procedure with the first question for each graphic on the sheet.
7. Have the students get into pairs. Tell them to work together to complete the handout. Remind the students that each is responsible for completing his or her own handout.
8. When the students have finished the task, ask volunteers to share their responses. Discuss the responses for accuracy and have the volunteers write the correct responses on the transparency.
9. To conclude instruction, have the students respond on the reverse side of their *What Do I Know about Portugal?* handout to the following question:
  - ✓ Why is it helpful to use maps, graphs, timelines, and tables when answering research questions?

Ask volunteers to share their responses. Use the responses to facilitate a brief review about the type of information that can be obtained from each type of graphic.

### **Alternative Instruction:**

- Choose a grade-level-appropriate nonfictional passage that contains an example of a map, a graph, a timeline, and a table. Discuss the information that could be included in a map, graph, timeline, and table. Distribute copies of the chosen passage and display a transparency of it. Read aloud the passage as the students read along silently. Explain to them that the answers to some questions are included in the graphic source and that these questions are called literal questions. Also, explain that some answers require interpretation of the data from the graphic source and that these are called interpretive questions. Ask a volunteer to give an example of a literal question that could be asked about the first graphic in the passage. Ask another volunteer to respond to the question. Discuss the response for accuracy. Write the question and answer on the classroom board and have the students do the same on a sheet of notebook paper. Repeat this procedure with an interpretive question and answer about the same graphic source. Tell the students to get into three-person groups. Have them work collaboratively to ask one literal and one interpretive question about each of the remaining graphic sources in the passage. Tell them to write the new questions and answers on their notebook paper. When the students have finished the task, return to a whole-group setting. Ask volunteers to share their questions and answers. Discuss the responses for accuracy. Then facilitate a discussion about how the information presented in a graphic can be used to answer literal and interpretive questions.

### **PRACTICE**

1. Have the students get into pairs. Distribute copies of the chosen passage and list of questions.
2. Tell the students to work collaboratively to use the information presented by the graphics to answer the questions. Remind the students that they may work together, but each is responsible for his or her own handout.
3. When the students have completed the task, ask volunteers to read the responses on their handout. Discuss the responses for accuracy. Then facilitate a discussion that shows that information in graphics can be used to answer research questions.

### **Alternative Practice:**

- Choose a grade-level-appropriate nonfictional passage that contains a map, a graph, a timeline, and a table. Have the students get into book-club groups. Distribute copies of the passage and have the students read it. Tell the groups to formulate several literal and interpretive questions about each graphic contained in the passage, and have them write the questions on a sheet of notebook paper. When they have finished, have them exchange questions with another book-club group and answer the other group's questions. Have the

students write the answers on the back of the sheet of questions. When they have finished, have them return the questions and answers to the original group to be checked for accuracy. Ask volunteers to share the questions and the answers about each graphic source. Discuss the responses for accuracy. Review how maps, graphs, timelines, and tables can be used to answer different levels of questions.

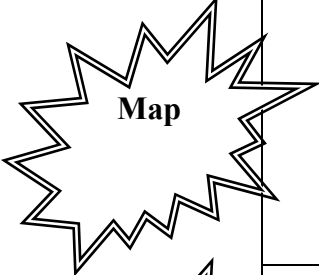
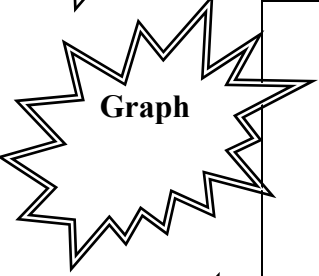
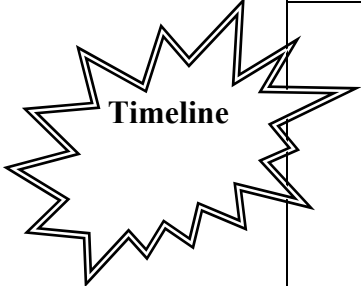
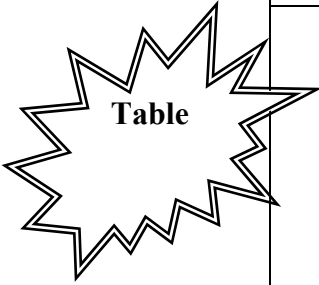
## ASSESSMENT

- Have the students read the chosen passage. Prepare several multiple-choice questions in the following manner (four choices):
  - ✓ (Timeline)  
In what year did (event) occur?
  - ✓ (Map, graph, timeline, or table)  
What is probably the best reason there is/is not (information) given about (topic)?
  - ✓ (Map, graph, timeline, or table)  
Using the information on the (graph/timeline/table), which (topic(s)) was (were) probably not (fact)?
  - ✓ (Map, graph, timeline, or table)  
Which of the (topic) (action)?
  - ✓ (Map, graph, timeline, or table)  
Which part of the (map/graph/timeline/table) needs more detail in order to discuss (topic)?
  - ✓ (Map, graph, timeline, or table)  
Which (topic) would be best for (action)?
  - ✓ (Map, graph, timeline, or table)  
What is probably the best reason for (action)?

### Alternative Assessment:

- Choose a grade-level-appropriate nonfictional passage that contains an example of each of the following graphic sources: a map, a graph, a timeline, and a table, and have the students read it. Prepare several multiple-choice questions in the following manner (four choices):
  - ✓ (timeline)  
When did (event) occur?
  - ✓ (map/graph/timeline/table)  
What information does the (map/graph/timeline/table) give about (topic)?
  - ✓ (map/graph/timeline/table)  
Which would be a good question to ask about (map/graph/timeline/table)?
  - ✓ (map/graph/timeline/table)  
What inference can you make about the information presented in (map/graph/timeline/table)?

# A Few Graphic Sources

	Definition	Possible Uses
 Map		
 Graph		
 Timeline		
 Table		

# **A Little Country in Europe**

There is a small country on the west side of the Iberian Peninsula, just to the west of Spain. This country is Portugal. The major cities of Portugal are Lisbon and Porto. Lisbon is the capital city. It is one of the few cities in Europe with wide avenues and streets. This is because when an earthquake damaged the city in 1755, it was rebuilt with a more modern traffic design. Porto is in the northern section of Portugal and is named for its famous port wine. It is a modern commercial city with many monuments and museums.

Portugal is one of the smaller countries in Europe. It is slightly smaller than the state of Indiana. It had a population, as of July 2004, of just slightly more than 10.5 million people.

Tourists often go to Portugal because of the refreshing weather. It is usually cool and rainy in the north and warmer and drier in the south.

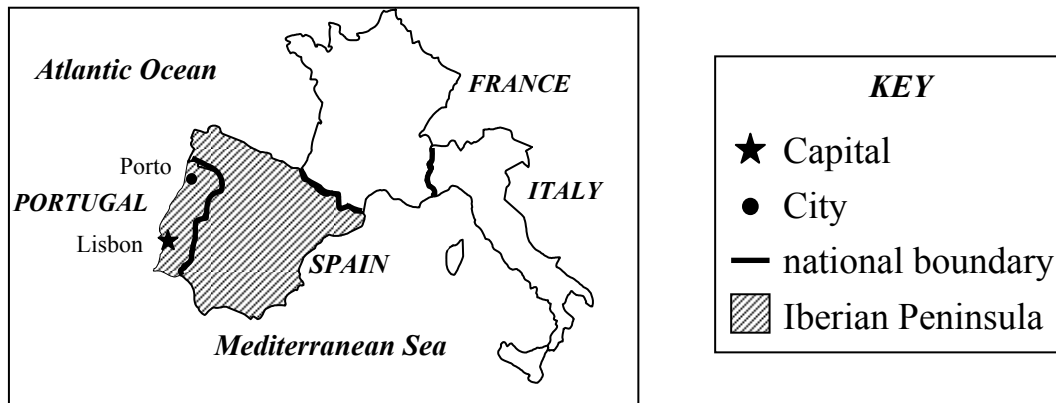
The government of Portugal is a parliamentary democracy. Portugal is one of the oldest countries in Europe and has a long history of success on the oceans and seas.

Portugal, although small, is a popular tourist attraction. Its old-world charm, modern conveniences, and many festivals make it an exciting place to visit on your next vacation.

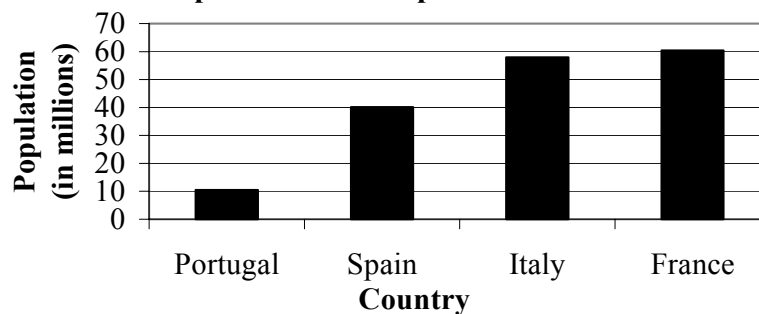


# Graphic Information about Portugal

Map of Southern Europe



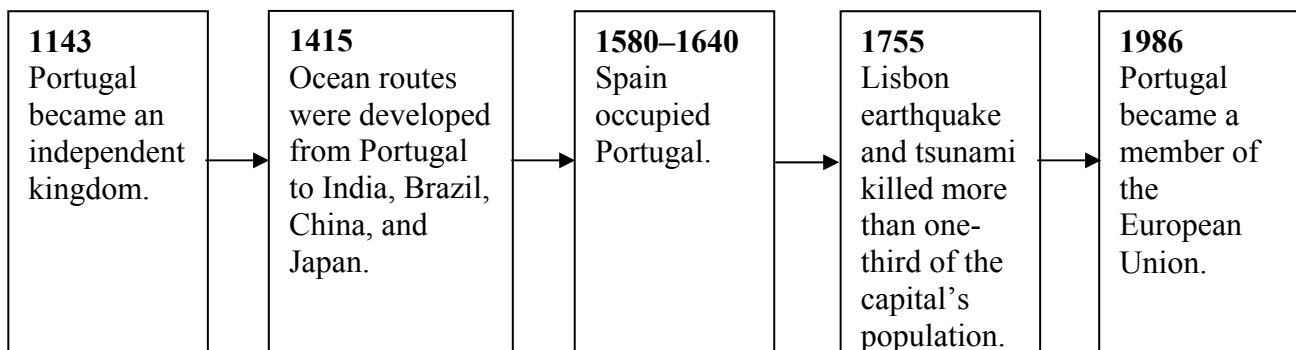
Population of European Countries



Temperatures in Portuguese Cities

City	Maximum	Minimum
Porto	68°F	50°F
Braganca	64°F	43°F
Lisbon	79°F	48°F
Faro	72°F	54°F

Timeline of Important Events in the History of Portugal



Name \_\_\_\_\_

## What Do I Know about Portugal?

### MAP

1. Why are sailors most likely an important part of Portugal's history?  
\_\_\_\_\_
2. What are two of Portugal's main cities?  
\_\_\_\_\_
3. Which European country is closest to Portugal?  
\_\_\_\_\_

### BAR GRAPH

1. Which country has the smallest population?  
\_\_\_\_\_
2. Which countries are named on the graph?  
\_\_\_\_\_
3. What is the difference in population between Portugal and France?  
\_\_\_\_\_

### TABLE

1. Why do you think Faro would be the best place to take a winter vacation?  
\_\_\_\_\_
2. Which city in Portugal has the coldest minimum temperature?  
\_\_\_\_\_
3. Which city in Portugal has the hottest maximum temperature?  
\_\_\_\_\_

### TIMELINE

1. When did Portugal become an independent kingdom?  
\_\_\_\_\_
2. When did Portugal become a member of the European Union?  
\_\_\_\_\_
3. Why do you think much of Lisbon had to be rebuilt in the eighteenth century?  
\_\_\_\_\_